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ABSTRACT

Novel silicon-containing polymers are obtained by copolymerizing a vinylsilane monomer with a compound having a low electron density unsaturated bond such as maleic anhydride, maleimide derivatives or tetrafluoroethylene. Using the polymers, chemical amplification positive resist compositions sensitive to high-energy radiation and having a high sensitivity and resolution at a wavelength of less than 300 nm and improved resistance to oxygen plasma etching are obtained.